



### Specifications

<b>LIGHTING</b>	Integrated LED light source offering high lumen output and efficacy. Color consistency of 3 SDCM. See additional information summarizing lumen distribution, wattage, and efficacy on following pages. Tunable white option available.
<b>LUMEN MAINTENANCE</b>	Reported TM-21 Lifetimes L90(17k) = 52,600 hours L80(17k) > 102,000 hours L90(17k) > 102,000 hours
<b>CONSTRUCTION</b>	1/16" 3form Varia. White Opal top and bottom diffuser. Contact your local sales rep for material samples.
<b>ELECTRICAL</b>	Emergency battery output: 6 watts for 90 minutes. Maximum Mounting height: 10.5ft. Compatible with Signify Bodine sinusoidal output emergency lighting inverters. Signify Bodine inverters allow designated lighting fixtures to serve as code compliant emergency lighting sources during failure of normal AC power. For additional information see link: <a href="http://www.bodine.com/products/inverter.html">http://www.bodine.com/products/inverter.html</a>
<b>MOUNTING</b>	Adjustable stainless steel aircraft cable, contact studio for lengths over 20'
<b>DRIVERS</b>	120-277V constant current, dimming driver standard. Can be wired dimming or non-dimming. 0-10v dimming input with a range of 1%-100%. Dim-to-Off standard. Driver can be accessed from the fixture. Power factor of > .95. Total Harmonic Distortion (THD) of < 20%.

<b>CERTIFICATION</b>	Luminaire is CSA listed conforming to UL Standard 1598 in the U.S. and CAN/CSA C22.2 No. 250.0 in Canada. In accordance with NEC Code 410.73 (G), this luminaire contains an internal driver disconnect. Damp Location Rated. All electronic components are RoHS compliant, and the mechanical components of the luminaire have been verified to meet RoHS Directive 2002/95/EC.
<b>SHADES</b>	9mm thick Sola Felt is a PET material, manufactured with 50% post-consumer recycled content. Sola Felt is a LBC Red List Free labeled product, eligible for LEED, Living Building Challenge, and other green building certification credits. Frosted acrylic diffuser tube with removable acrylic bottom diffuser at bottom (for changing optic kits or relamping E26 version). Contact your local sales rep for material samples.
<b>CLEANING &amp; CARE</b>	Designed to withstand the demands of rigorous cleaning requirements. Effective cleaning and disinfection of environmental surfaces reduces microbe transmission. Superior chemical resistance and durability promotes safety in any design application. Use common disinfectants and cleaners to reduce microbe transmission.
<b>WARRANTY</b>	5 year warranty on all standard components.



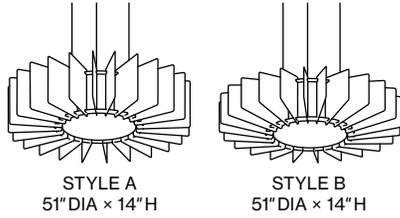
# Echo One

## Fixture Options

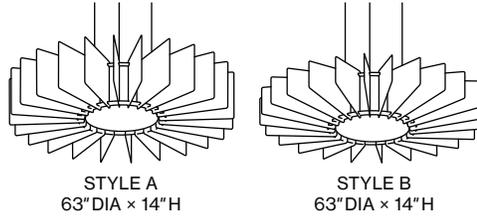
ACOUSTIC COLLECTION

**DIMENSIONS** *Optional spacers between adjacent pendants to create grids*

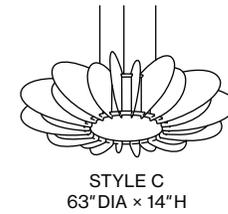
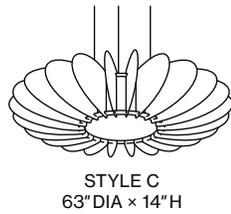
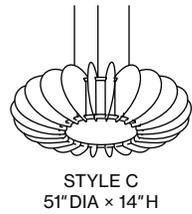
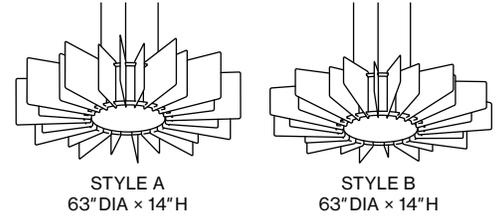
### 51" DIAMETER



### 63" DIAMETER

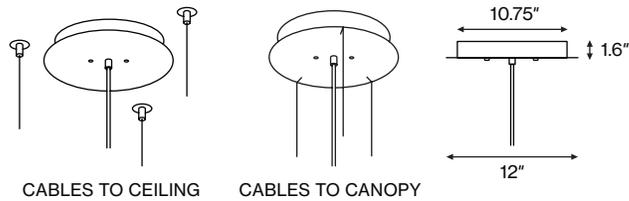


### ALTERNATING FINNS

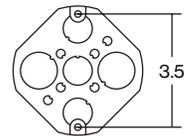


### CEILING CONNECTIONS

**DIMENSIONS** *Available in both Recessed and Surface Mount canopies. For recessed canopy, cut 11" dia hole and recess j-box or mounting structure by 1.5".*



**4" OCTAGONAL JUNCTION BOX (BY OTHERS)**



*Required for powered units; optional for unlit units*

**CANOPY/DRESS PLATE FINISH OPTIONS**



### FELT COLOR & PATTERN OPTIONS

#### COLOR OPTIONS



#### PATTERN OPTIONS



# Echo One

## Lighting Details

ACOUSTIC COLLECTION

### PERFORMANCE – ECHO ONE

Based on 3500K / 90CRI / Standard Distribution

NOMINAL LUMEN OUTPUT (LM)	INPUT POWER (W)	EFFICACY (LM/W)
999	11.52	86.70
2002	23.76	84.30
3001	36.81	81.50
4000	50.78	78.80
4999	65.83	75.90
6002	82.11	73.10

### LIGHT DISTRIBUTION

Based on measurement data

COLOR TEMPERATURE / CRI	MULTIPLIER
2700K / 80	0.98
2700K / 90	0.93
3000K / 80	1.02
3000K / 90	0.97
3500K / 80	1.00
3500K / 90	1.00
4000K / 80	1.08
4000K / 90	1.03

### OUTPUT MULTIPLIERS INSTRUCTIONS

Adjusted Value =  $L_1 \times C_m$  where:

$L_1$  = (Lumen output at 3500K / 90 CRI) ×

$C_m$  = (Color Temp. / CRI Multiplier) ×

Example:

850LM / 3000K / 80CRI

$(850) \times (1.02) = 789LM$



MADE IN USA  
WITH GLOBAL AND  
DOMESTIC PRODUCTS

**SABINS PER FIXTURE** *Equivalent square feet of perfect absorption*

CENTER FREQUENCY (HZ)	ECHO ONE-51-FIN STYLE B	ECHO ONE-63-FIN STYLE A
100	5.73	13.83
125	4.73	6.25
160	4.66	6.67
200	7.02	11.55
250	9.29	15.90
315	14.28	22.34
400	14.25	22.61
500	15.38	24.04
630	16.15	25.47
800	18.71	30.14
1000	19.72	30.75
1250	20.66	33.36
1600	21.18	34.49
2000	23.92	37.92
2500	25.48	41.23
3150	27.47	43.80
4000	28.73	45.05
5000	28.25	43.66
AVERAGE OF 250, 500, 1000, 2000 HZ	17.17	27.48
NRC PER FIXTURE (CIRCULAR FOOTPRINT)	1.20	1.25
EQUIVALENT SQ FT OF ACT (NRC 0.90)	19.01	30.50
EQUIVALENT SQ FT OF ACT (NRC 0.70)	24.50	39.30

## Absorption

NRC per Fixture: 1.20  
Absorption per Fixture: 7.59-15.50 Sabins

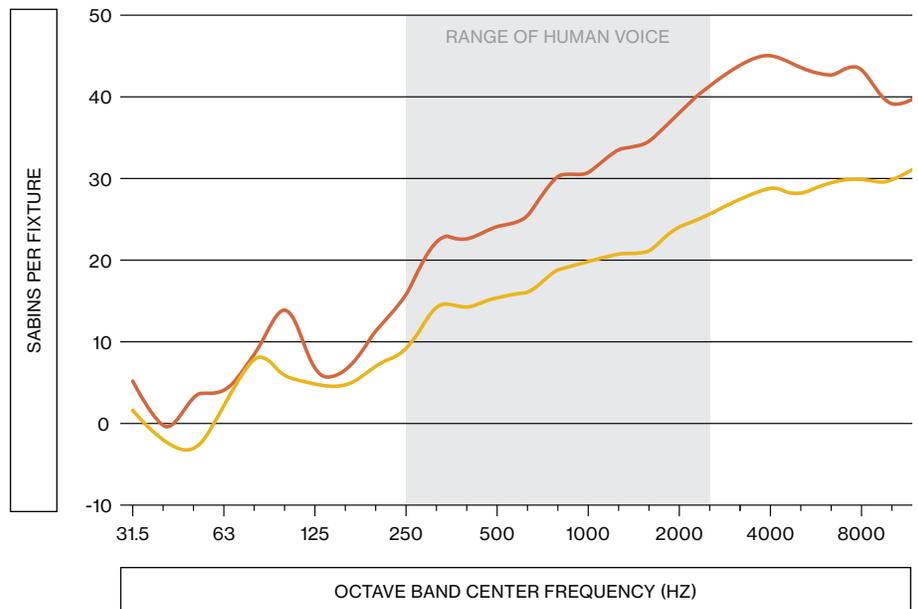
*Average of values taken at 250, 500, 1000, and 2000 Hz*

*NRC for Echo system, with spanners, over entire installation footprint: 0.80 - 1.00*

*The C-style fixtures have not been laboratory tested. The surface area of the C-style fins and spanners meet or slightly exceed the B-style fixtures, we expect similar acoustical performance.*

*The acoustic testing of Echo One was conducted at NVLAP accredited laboratories and meets ISO 354 and ASTM C423. Formal test reports are available upon request.*

- 63DIA FIN STYLE A
- 51DIA FIN STYLE B



**SPECIFICATION CODE**

Example: 2 QTY ACC-SHPE-ECON------------

QTY.  ACC-SHPE-ECON------------

1
2
3
4
5
6
7
8
9
10
11

Complete form to order Echo One fixture(s). For each number, make one selection and enter in the corresponding box above.

\*Indicates modified choices; additional lead times, cost, and limited lumen outputs may apply.

**1 DIAMETER / FIN CONFIGURATION**

**2 FIN STYLE** All fins 14" in height

- 51D 51" DIAMETER
- 63D 63" DIAMETER
- EALT ALTERNATING FINs

- |                            |   |                   |                            |   |                         |                            |   |                         |
|----------------------------|---|-------------------|----------------------------|---|-------------------------|----------------------------|---|-------------------------|
| <input type="checkbox"/> A |  | A FINS<br>51" Dia | <input type="checkbox"/> B |  | B FINS<br>51" Dia       | <input type="checkbox"/> C |  | C FINS<br>51" Dia       |
| <input type="checkbox"/> B |  | 63" Dia           | <input type="checkbox"/> C |  | 63" Dia                 |                            |   |                         |
|                            |   |                   | <input type="checkbox"/>   |    | A SPANNERS<br>for grids | <input type="checkbox"/>   |  | B SPANNERS<br>for Grids |
|                            |   |                   | <input type="checkbox"/>   |    |                         | <input type="checkbox"/>   |  | C SPANNERS<br>for Grids |
|                            |   |                   | <input type="checkbox"/>   |    |                         | <input type="checkbox"/>   |  |                         |

**3 FELT COLOR**

COLOR OPTIONS

PATTERN OPTIONS

- |                                       |                                      |  |   |
|---------------------------------------|--------------------------------------|--|---|
| <input type="checkbox"/> EB EBONY     | <input type="checkbox"/> EM EMERALD  | <input type="checkbox"/> LC LILAC      | <input type="checkbox"/> DWA WALNUT     |
| <input type="checkbox"/> NF NIGHTFALL | <input type="checkbox"/> BU BURGUNDY | <input type="checkbox"/> AD ADMIRAL    | <input type="checkbox"/> IOK IRON OAK   |
| <input type="checkbox"/> CA CAST      | <input type="checkbox"/> CI CINNAMON | <input type="checkbox"/> DK DUSK       | <input type="checkbox"/> WA CARMEL OAK  |
| <input type="checkbox"/> SLT SILT     | <input type="checkbox"/> JP JASPER   | <input type="checkbox"/> STB STEELBLUE | <input type="checkbox"/> BA RICH BAMBOO |
| <input type="checkbox"/> ML MINERAL   | <input type="checkbox"/> SF SAFFRON  | <input type="checkbox"/> PT PLATINUM   |   |
| <input type="checkbox"/> STL STEEL    | <input type="checkbox"/> OCH OCHRE   | <input type="checkbox"/> DW DRIFTWOOD  |   |
| <input type="checkbox"/> AR ARMOR     | <input type="checkbox"/> MU MUSTARD  | <input type="checkbox"/> DN DUNE       |   |
| <input type="checkbox"/> NI NICKEL    | <input type="checkbox"/> AS ARIES    | <input type="checkbox"/> VL VANILLA    |   |
| <input type="checkbox"/> ZN ZINC      | <input type="checkbox"/> CT CITRINE  |  |   |

**4 SUSPENSION**

**5 LED CRI/CCT**

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> STD 12" - 96"   | <input type="checkbox"/> 827CK 80 CRI / 2700K | <input type="checkbox"/> 930CK 90 CRI / 3000K   |
| <input type="checkbox"/> EXT* 12" - 240" | <input type="checkbox"/> 830CK 80 CRI / 3000K | <input type="checkbox"/> 935CK 90 CRI / 3500K   |
|  | <input type="checkbox"/> 835CK 80 CRI / 3500K | <input type="checkbox"/> 940CK 90 CRI / 4000K   |
|  | <input type="checkbox"/> 840CK 80 CRI / 4000K | <input type="checkbox"/> TW TUNABLE WHITE       |
|  | <input type="checkbox"/> 927CK 90 CRI / 2700K | <i>Driver selection limited to P01 and DALI</i> |

**6 OUTPUT**

- |   |  |
|---|--|
| <input type="checkbox"/> 1000LM 1000 LM | <input type="checkbox"/> 5000LM 5000 LM    |
| <input type="checkbox"/> 2000LM 2000 LM | <input type="checkbox"/> 6000LM 6000 LM    |
| <input type="checkbox"/> 3000LM 3000 LM | <input type="checkbox"/> CU* CUSTOM OUTPUT |
| <input type="checkbox"/> 4000LM 4000 LM | _____ lm                                   |

CONTINUE TO NEXT PAGE TO COMPLETE SPECIFICATION



CONTINUE SPECIFICATION

### 7 DIMMING AND CONTROLS

- P01 0-10V 1% DIMMING
- LEC\* HI-LUME 1% ECOSYSTEM LED DRIVER SOFT ON, FADE TO BLACK (LDE1 SERIES)
- EBM 0-10V 1% DIMMING INTEGRATED EM BATTERY OPTION  
*Max Lumen output limited—consult LightArt.  
Not available with Tunable White.*
- DALI DALI CONTROL

### 8 CANOPY OPTIONS

- WPC WHITE
- BPC BLACK
- RWPC RECESSED WHITE
- RBPC RECESSED BLACK

### 9 POWER CORD *Cord color dictates visible metal color*

- WH WHITE
- BK BLACK

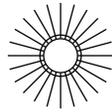
### 10 CABLE CONNECTION

- CCL CABLES TO CEILING
- CCN CABLES TO CANOPY

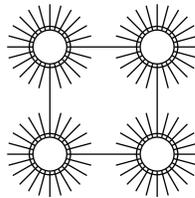
### 11 ARRANGEMENT *Grids feature pendants 48" on center*

- EOP ECHO PENDANT
- CG\* CUSTOM GRID

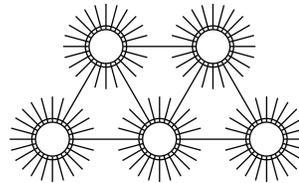
ECHO PENDANT



CUSTOM GRID EXAMPLES\*



SQUARE GRID



TRIANGLE GRID

\*Indicates modified choices; additional lead times, cost, and limited lumen outputs may apply.

